



California Cooperative
Snow Surveys
Bulletin 120-4-08

State of California
The Resources Agency

Department of
Water Resources

Water Conditions in California

Report 4 May 1, 2008



Arnold Schwarzenegger
Governor
State of California

Mike Chrisman
Secretary for Resources
The Resources Agency

Lester A. Snow
Director
Department of Water Resources

STATE OF CALIFORNIA
Arnold Schwarzenegger, Governor

THE RESOURCES AGENCY
Mike Chrisman, Secretary for Resources

Department of Water Resources

Lester A. Snow
Director

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COOPERATING AGENCIES

Public Agencies

Buena Vista Water Storage District
East Bay Municipal Utility District
Eldorado Irrigation District
Friant Water Users Association
Kaweah Delta Water Conservation District
Kern Delta Water District
Kings River Conservation District
Lower Tule River Irrigation District
Merced Irrigation District
Modesto Irrigation District
Nevada Irrigation District
North Kern Water Storage District
Northern California Power Agency
Oakdale Irrigation District
Omochochumne-Hartnell Water District
Oroville-Wyandotte Irrigation District
Placer County Water Agency
Sacramento Municipal Utility District
San Joaquin River Exchange Contractors Water Authority
South San Joaquin Irrigation District
Tri-Dam Project
Truckee River Basin Water Commission
Tulare Lake Basin Water Storage District
Turlock Irrigation District
Yuba County Water Agency
Private Organizations
J.G. Boswell Company
Kaweah and St. Johns River Association
Kings River Water Association
Tule River Association
State Water Project Contractors

Municipalities

City of Bakersfield Water Department
City of Los Angeles Department of Water and Power
City and County of San Francisco Hetch Hetchy Water and Power

State Agencies

University of California
Central Sierra Snow Laboratory
Scripps Institution of Oceanography
California Department of Forestry & Fire Protection
California Department of Water Resources

Public Utilities

Pacific Gas and Electric Company
Southern California Edison Company

Federal Agencies

U.S. Department of Agriculture
Forest Service(14 National Forests)
Natural Resource Conservation Service
U.S. Department of Commerce
National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources
National Park Service(3 National Parks)
U.S. Department of Army
Corps of Engineers

Other Cooperative Programs

Nevada Cooperative Snow Surveys
Oregon Cooperative Snow Surveys

SUMMARY OF WATER CONDITIONS

May 1, 2008

Two consecutive months of record low precipitation have taken their toll on spring runoff. As a result, forecasts of snowmelt runoff have been significantly reduced but are still better than last year's meager runoff, especially in the southern Sierra Nevada

Forecasts of April through July runoff are 70 percent of average statewide. The wettest outlook is for the Trinity River on the North Coast and the driest outlook is for the North Lahontan region.

Snowpack water content is about 65 percent of average for the date and about 50 percent of the average on April 1, the date of normal maximum accumulation. This represents a loss of half the measured water content since April 1. Last year the snowpack on May 1 was only 25 percent of average.

Precipitation from October through April was about 85 percent of average compared to 65 percent last year. The major Central Valley regions are showing 70 to 80 percent of average. April precipitation was a dismal 20 percent.

Runoff so far this season has been about 60 percent of average, not much better than the 55 percent recorded last year. April runoff was also about 60 percent of average. Estimated runoff for the eight major rivers of the Sacramento and San Joaquin River regions during April was 1.9 million acre feet. Based on the May 1 forecast the water supply indices for both the Sacramento and the San Joaquin regions are in the critical category.

Reservoir storage on May 1 was about 85 percent of average, the lowest since 1994. Last year May 1 storage was 105 percent of average. About 60 percent of total capacity was being used.

SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

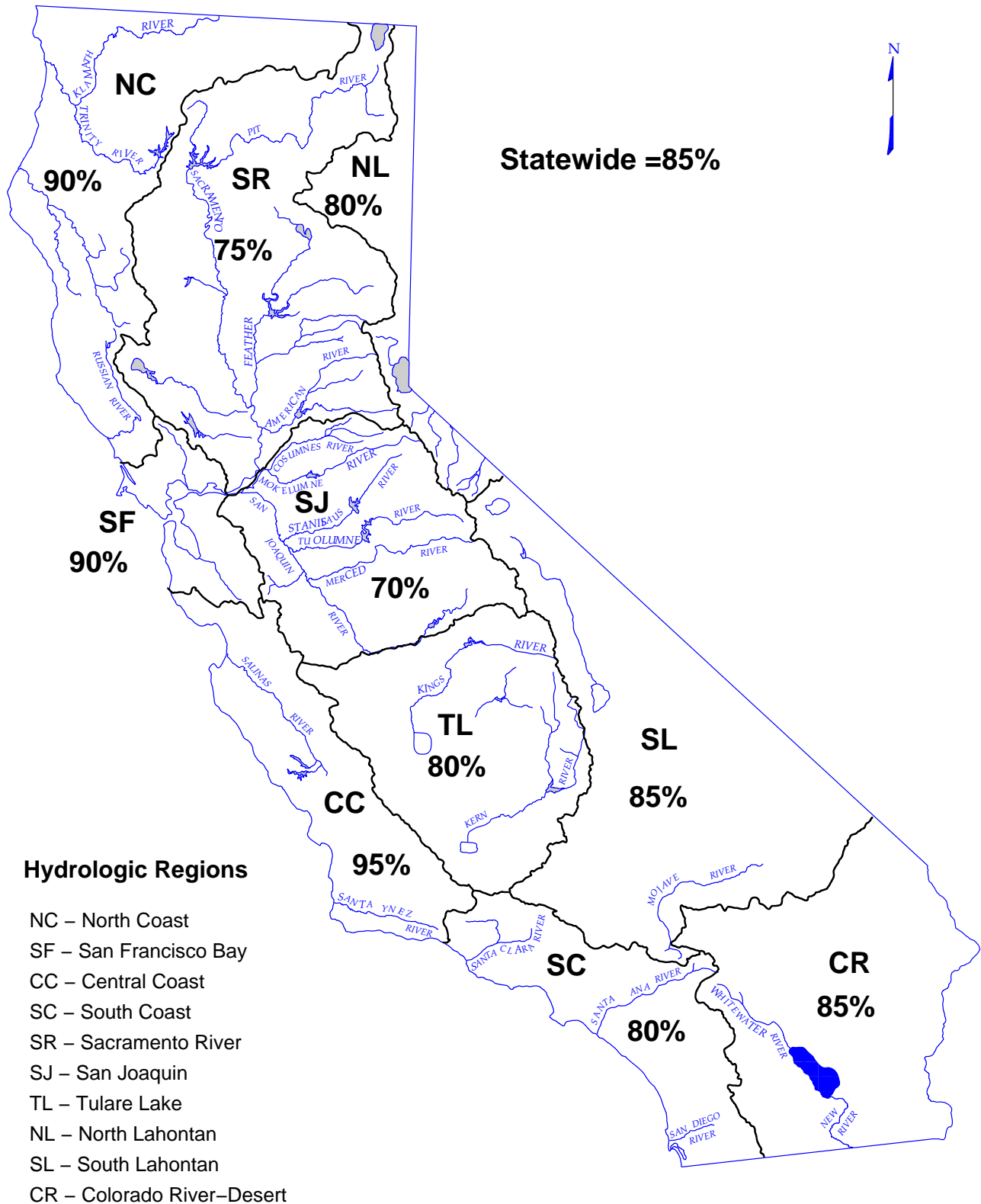
HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	May 1 SNOW WATER CONTENT	May 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	90	120	85	65	85	70
SAN FRANCISCO BAY	90	--	95	60	--	--
CENTRAL COAST	95	--	100	75	--	--
SOUTH COAST	80	--	95	85	--	--
SACRAMENTO RIVER	75	65	80	55	70	60
SAN JOAQUIN RIVER	70	60	85	55	70	60
TULARE LAKE	80	65	80	70	75	70
NORTH LAHONTAN	80	60	75	55	60	55
SOUTH LAHONTAN	85	35	90	65	85	80
COLORADO RIVER- DESERT	85	--	--	--	--	--
STATEWIDE	85	65	85	60	70	60

DEPARTMENT OF WATER RESOURCES

CALIFORNIA COOPERATIVE SNOW SURVEYS

SEASONAL PRECIPITATION

IN PERCENT OF AVERAGE TO DATE
October 1, 2007 through April 30, 2008

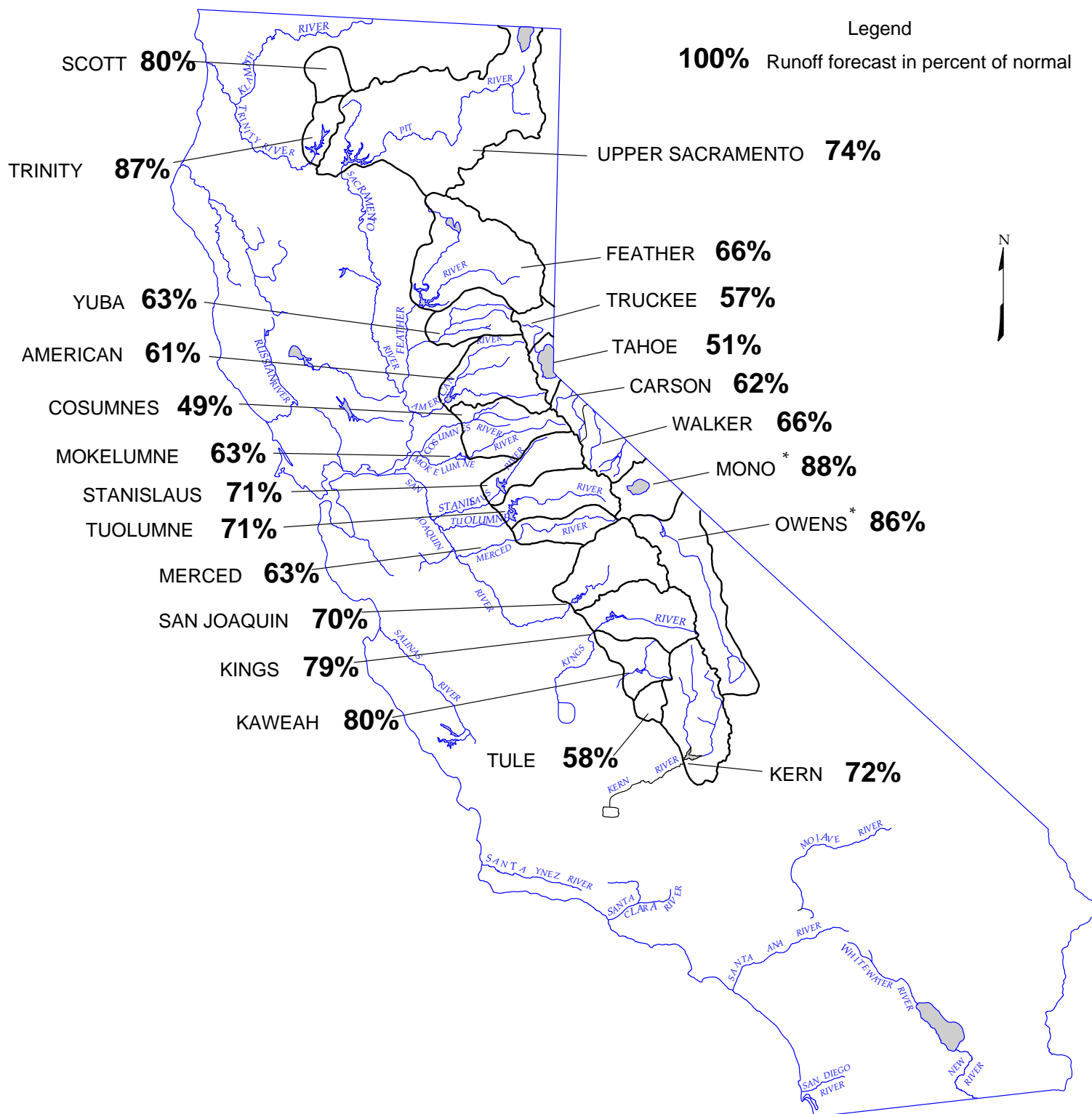


WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

DEPARTMENT OF WATER RESOURCES CALIFORNIA COOPERATIVE SNOW SURVEYS

FORECAST OF APRIL – JULY UNIMPAIRED SNOWMELT RUNOFF

May 1, 2008



MAY 1, 2008 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1)					
	HISTORICAL			FORECAST		
	50 Yr Avg (2)	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg	80 % Probability Range (1)
SACRAMENTO RIVER						
Upper Sacramento River						
Sacramento River at Delta above Shasta Lake	298	711	39	220	74%	
McCloud River above Shasta Lake	392	850	185	310	79%	
Pit River near Montgomery Creek + Squaw Creek	1,066	2,098	480	790	74%	
Total Inflow to Shasta Lake	1,819	3,525	726	1,350	74%	1,110 - 1,750
Sacramento River above Bend Bridge, near Red Bluff	2,494	5,075	943	1,860	75%	1,550 - 2,390
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	230	69%	
North Fork at Pulga (3)	1,028	2,416	243	660	64%	
Middle Fork near Clio (4)	86	518	4	50	58%	
South Fork at Ponderosa Dam (3)	110	267	13	65	59%	
Feather River at Oroville	1,782	4,676	392	1,180	66%	900 - 1,590
Yuba River						
North Yuba below Goodyears Bar	279	647	51	170	61%	
Inflow to Jackson Mdw and Bowman Reservoirs (3)	112	236	25	70	63%	
South Yuba at Langs Crossing (3)	233	481	57	140	60%	
Yuba River near Smartville plus Deer Creek	1,006	2,424	200	630	63%	490 - 780
American River						
North Fork at North Fork Dam (3)	262	716	43	140	53%	
Middle Fork near Auburn (3)	522	1,406	100	310	59%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	100	58%	
American River below Folsom Lake	1,240	3,074	229	760	61%	590 - 960
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	126	363	8	62	49%	25 - 110
Mokelumne River						
North Fork near West Point (5)	437	829	104	270	62%	
Total Inflow to Pardee Reservoir	461	1,065	102	290	63%	250 - 340
Stanislaus River						
Middle Fork below Beardsley Dam (3)	334	702	64	230	69%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	150	67%	
Stanislaus River below Goodwin Reservoir (7)	702	1,710	116	500	71%	410 - 600
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy	315	727	97	230	73%	
Tuolumne River near Hetch Hetchy	604	1,392	153	450	75%	
Tuolumne River below La Grange Reservoir (7)	1,220	2,682	301	870	71%	770 - 1,040
Merced River						
Merced River at Pohono Bridge	372	888	80	250	67%	
Merced River below Merced Falls (7)	632	1,587	123	400	63%	340 - 510
San Joaquin River						
San Joaquin River at Mammoth Pool (8)	1,026	2,279	235	750	73%	
Big Creek below Huntington Lake (9)	91	264	11	60	66%	
South Fork near Florence Lake (8)	201	511	58	150	75%	
San Joaquin River inflow to Millerton Lake	1,254	3,355	262	880	70%	730 - 1,050
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	190	79%	
Kings River below Pine Flat Reservoir	1,224	3,113	274	970	79%	850 - 1,110
Kaweah River below Terminus Reservoir						
	286	814	62	230	80%	190 - 290
Tule River below Lake Success						
	64	259	2	37	58%	29 - 59
Kern River						
Kern River near Kernville	384	1,203	83	280	73%	
Kern River inflow to Lake Isabella	461	1,657	84	330	72%	270 - 400

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1956-2005 unless otherwise noted

(3) 50 year average based on years 1941-90

(8) 50 year average based on years 1953-2002

(9) 50 year average based on years 1946-1995

(4) 44 year average based on years 1936-79

(5) 36 year average based on years 1936-72

(6) 45 year average based on years 1936-81

MAY 1, 2008 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

Unimpaired Runoff in 1,000 Acre-Feet (1)													
HISTORICAL			DISTRIBUTION								FORECAST		
50 Yr Avg (2)	Max of Record	Min of Record	Oct Thru Jan*	Feb *	Mar *	Apr *	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)
887	1,965	165											
1,217	2,353	557											
3,159	5,150	1,484											
6,107	10,796	2,479	1,335	610	525	370	450	300	230	405	4,225	69%	3,910 - 4,750
8,907	17,180	3,294	2,010	1,005	700	455	660	440	305	520	6,095	68%	5,695 - 6,775
780	1,269	366											
2,417	4,400	666											
219	637	24											
291	562	32											
4,620	9,492	994	500	240	360	355	470	240	115	170	2,450	53%	2,125 - 2,920
564	1,056	102											
181	292	30											
379	565	98											
2,373	4,926	369	225	140	180	230	285	95	20	25	1,200	51%	1,045 - 1,360
616	1,234	66											
1,070	2,575	144											
318	705	59											
2,719	6,382	349	205	140	185	255	330	155	20	14	1,304	48%	1,130 - 1,510
390	1,253	20	30	27	22	23	28	9	2	1	142	36%	100 - 195
626	1,009	197											
755	1,800	129	25	30	50	80	140	65	5	2	397	53%	350 - 450
471	929	88											
1,171	2,952	155	75	55	75	135	220	120	25	15	720	62%	620 - 830
461	1,147	123											
770	1,661	258											
1,951	4,631	383	110	100	125	190	365	260	55	15	1,220	63%	1,110 - 1,430
461	1,020	92											
1,007	2,787	150	55	65	50	105	180	95	20	8	578	57%	515 - 700
1,337	2,964	308											
112	298	14											
248	653	71											
1,836	4,642	362	95	70	105	175	350	265	90	40	1,190	65%	1,020 - 1,380
284	607	58											
1,721	4,287	386	85	75	100	200	390	290	90	45	1,275	74%	1,150 - 1,430
454	1,402	94	31	31	39	54	90	70	16	7	338	74%	290 - 400
148	615	16	16	18	16	11	17	7	2	1	88	60%	75 - 115
558	1,577	163											
730	2,318	175	55	35	55	80	115	95	40	35	510	70%	440 - 590

* Unimpaired runoff in prior months based on measured flows

(7) Forecast point names based on USGS gage names. Stanislaus below Goodwin also known as inflow to New Melones, Tuolumne River below La Grange also known as inflow to Don Pedro, Merced River below Merced Falls also known as inflow to McClure.

**MAY 1, 2008 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Apr-Jul Unimpaired Runoff in 1,000 Acre-Feet (1)				
	HISTORICAL			FORECAST	
	50 Yr Avg (2)	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg

NORTH COAST

Trinity River

Trinity River at Lewiston Lake (3) 654 1,593 80 **570** 87%

Scott River

Scott River near Fort Jones (3) 200 400 30 **160** 80%

Klamath River

Total inflow to Upper Klamath Lake (4) 340 618 84 **330** 97%

NORTH LAHONTAN

Truckee River

Lake Tahoe to Farad accretions 261 713 52 **150** 57%
Lake Tahoe Rise (assuming gates closed, ft) 1.4 5.4 0.2 **0.7** 51%

Carson River

West Fork Carson River at Woodfords 54 135 12 **33** 61%
East Fork Carson River near Gardnerville 187 407 43 **115** 62%

Walker River

West Walker River below Little Walker, near Coleville 154 330 35 **105** 68%
East Walker River near Bridgeport 64 209 7 **41** 64%

SOUTH LAHONTAN

Owens River

Total tributary flow to Owens River (5) 235 579 96 **202** 86%

**MAY 1, 2008 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Water Year Unimpaired Runoff in 1,000 Acre-Feet (1)					
	HISTORICAL			FORECAST		
	50 Yr Avg (2)	Max of Record	Min of Record	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)

NORTH COAST

Trinity River

Trinity River at Lewiston Lake (3) 1,398 2,990 200 **985** 70% 870 - 1120

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1956-2005 unless otherwise noted

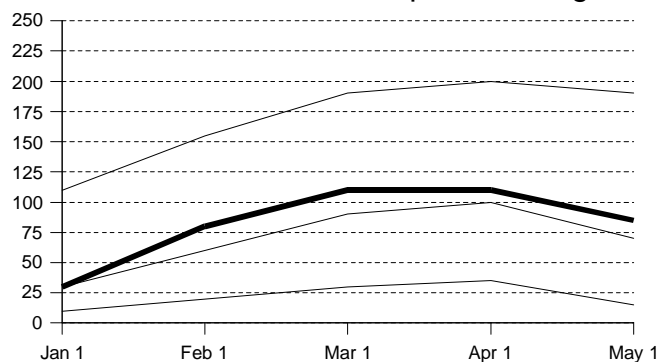
(3) Forecast by National Weather Service California-Nevada River Forecast Center.

(4) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center, May through September forecast, 30 year average based on years 1971-2000.

(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1951-2000.

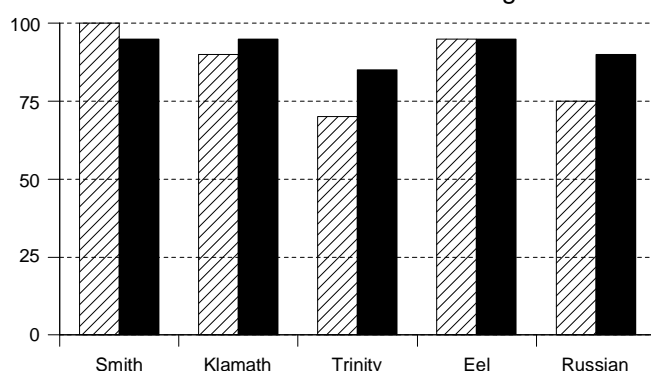
Snowpack Accumulation

Water Content in % of April 1 Average



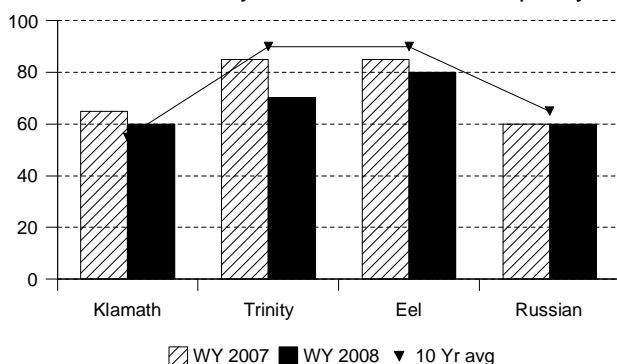
Precipitation

October 1 to date in % of Average



Reservoir Storage

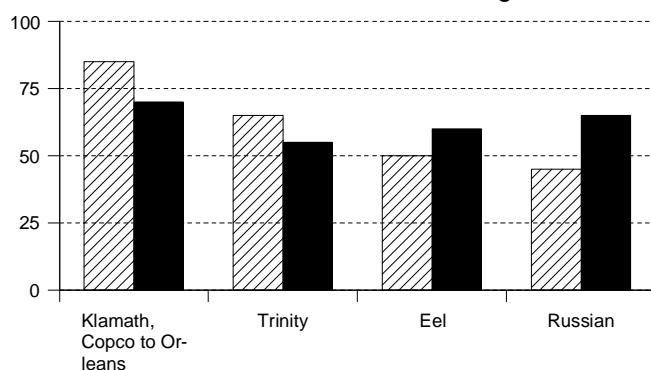
Contents of major reservoirs in % of capacity



▨ WY 2007 ■ WY 2008 ▼ 10 Yr avg

Runoff

October 1 to date in % of average



NORTH COAST REGION

SNOWPACK- First of the month measurements made at 10 snow courses indicate an area wide snow water equivalent of 27.8 inches. This is 85 percent of the seasonal April 1 average and 120 percent of the May 1 average. Last year at this time the pack was holding 8.1 inches of water.

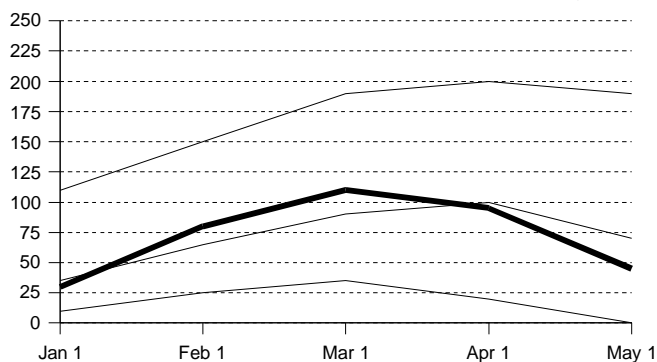
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 90 percent of normal. Precipitation last month was about 50 percent of the monthly average. Seasonal precipitation at this time last year stood at 80 percent of normal.

RESERVOIR STORAGE- First of the month storage in 6 reservoirs was 2.1 million acre-feet which is 85 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 100 percent of average.

RUNOFF-Seasonal runoff of streams draining the area totaled 7.2 million acre-feet which is 65 percent of the average for this period. Last year, runoff for the same period was 60 percent of average.

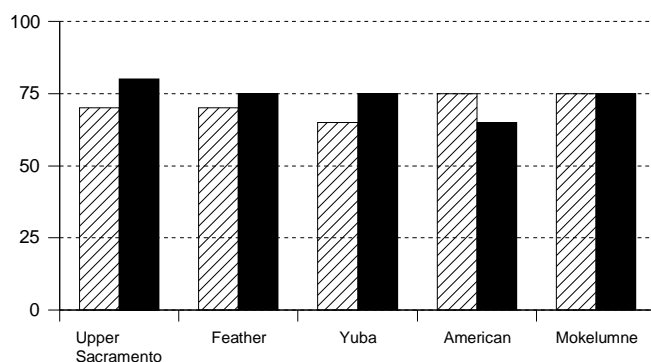
Snowpack Accumulation

Water Content in % of April 1 Average



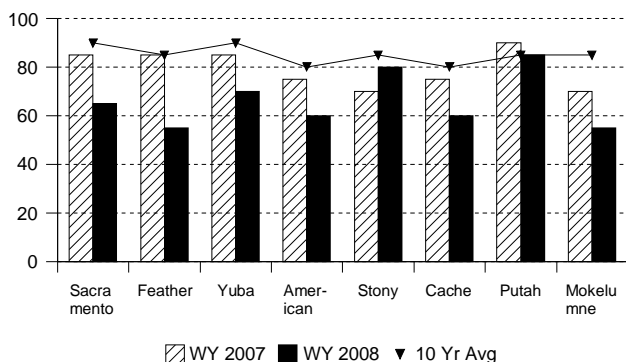
Precipitation

October 1 to date in % of Average



Reservoir Storage

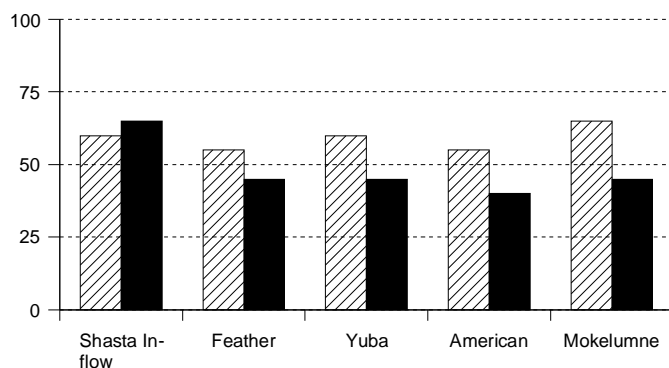
Contents of major reservoirs in % of capacity



▨ WY 2007 ■ WY 2008 ▼ 10 Yr Avg

Runoff

October 1 to date in % of average



SACRAMENTO RIVER REGION

SNOWPACK- First of the month measurements made at 66 snow courses indicate an area wide snow water equivalent of 16.5 inches. This is 45 percent of the seasonal April 1 average and 65 percent of the May 1 average. Last year at this time the pack was holding 8.4 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 75 percent of normal. Precipitation last month was about 15 percent of the monthly average. Seasonal precipitation at this time last year stood at 65 percent of normal.

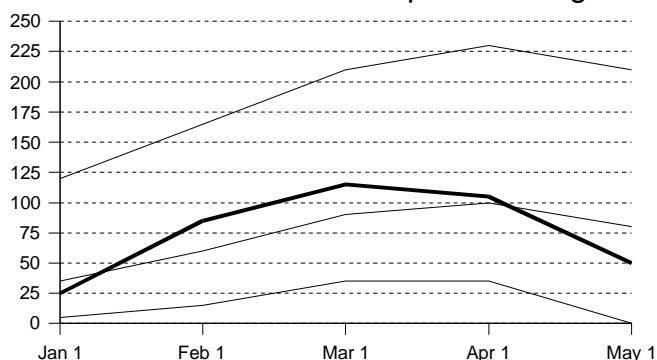
RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 10.4 million acre-feet which is 80 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

RUNOFF - Seasonal runoff of streams draining the area totaled 7.1 million acre-feet which is 55 percent of average for this period. Last year, runoff for the same period was 55 percent of average.

The **Sacramento Region 40-30-30 Water Supply Index** is forecast to be 5.4 assuming median meteorological conditions for the remainder of the year. This classifies the year as "critical" in the Sacramento Valley according to the State Water Resources Control Board.

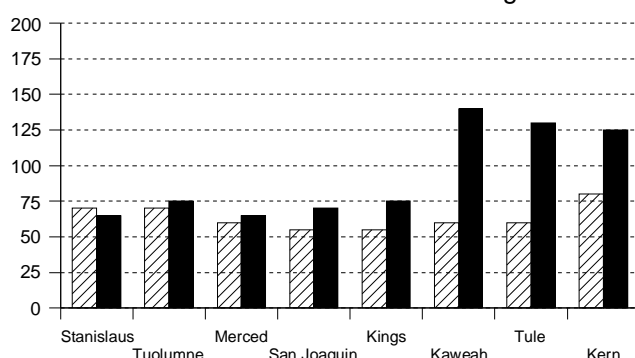
Snowpack Accumulation

Water Content in % of April 1 Average



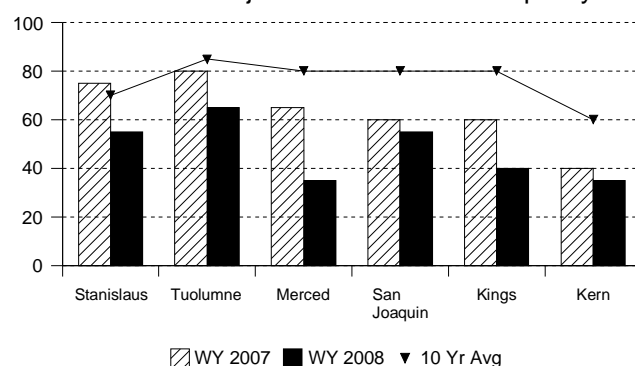
Precipitation

October 1 to date in % of Average



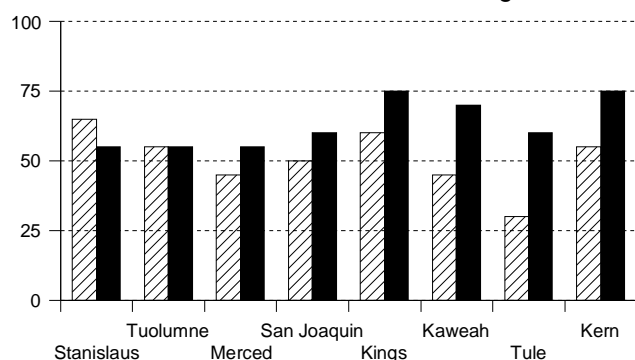
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

SNOWPACK- First of the month measurements made at 51 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 18.8 inches. This is 50 percent of the seasonal (April 1) average and 60 percent of the May 1 average. Last year at this time the pack was holding 10.0 inches of water. At the same time 30 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 13.6 inches which is 50 percent of the average for April 1 and 65 percent of May 1. Last year at this time the basin was holding 4.6 inches of water.

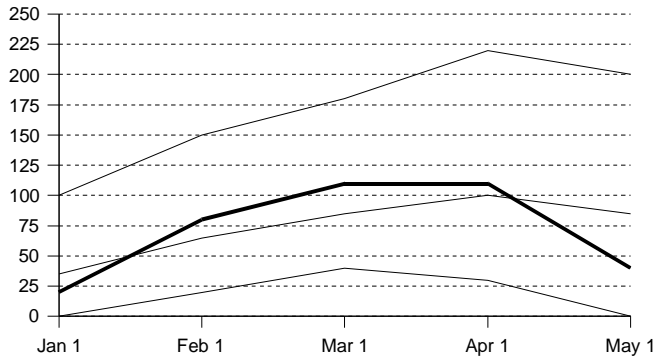
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 70 percent of normal. Precipitation last month was about 5 percent of the monthly average. Seasonal precipitation at this time last year stood at 65 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 80 percent of normal. Precipitation last month was about 5 percent of the monthly average. Seasonal precipitation at this time last year stood at 60 percent of normal.

RESERVOIR STORAGE- First of the month storage in 34 **San Joaquin Region** reservoirs was 6.7 million acre-feet which is 85 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was 110 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 870 thousand acre-feet which is 80 percent of average and about 40 percent of available capacity. Storage in these reservoirs at this time last year was 105 percent of average.

RUNOFF- Seasonal runoff of streams draining the **San Joaquin Region** totaled 1.9 million acre-feet which is 55 percent of average for this period. Last year, runoff for the same period was 55 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 904 thousand acre-feet which is 70 percent of average for this period. Last year runoff for this same period was 50 percent of average. The **San Joaquin Region 60-20-20 Water Supply Index** is forecast to be 2.1 assuming 75 percent of median meteorological conditions. This classifies the year as "critical" in the San Joaquin River Region according to the State Water Resources Control Board.

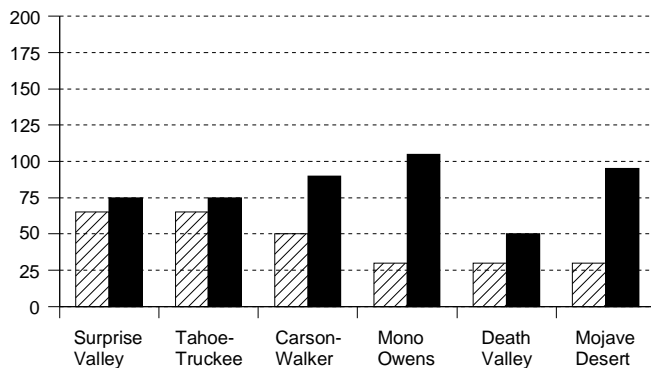
Snowpack Accumulation

Water Content in % of April 1 Average



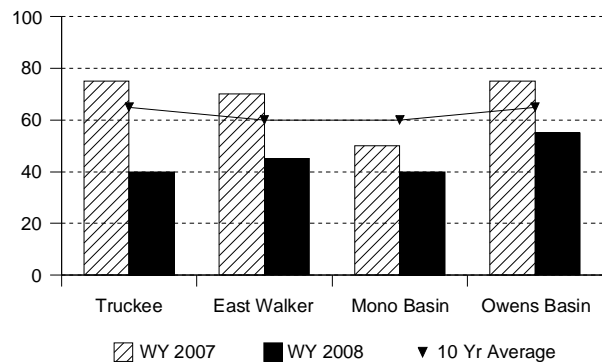
Precipitation

October 1 to date in % of Average



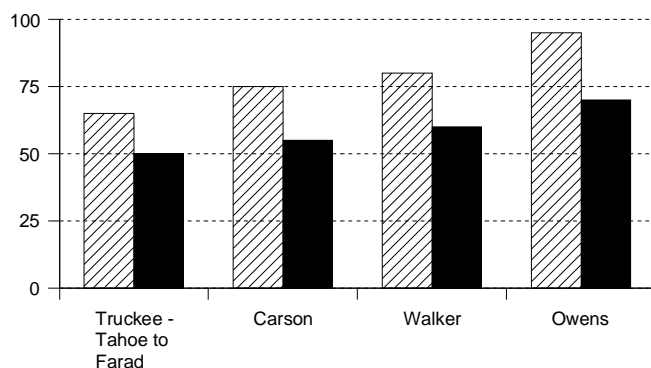
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH AND SOUTH LAHONTAN REGIONS

SNOWPACK- First of the month measurements made at 5 **North Lahontan Region** snow courses indicate an area wide snow water equivalent of 12.7 inches. This is 50 percent of the seasonal (April 1) average and 60 percent of the May 1 average. Last year at this time the pack was holding 5.9 inches of water. At the same time 2 **South Lahontan** snow courses indicated a basin-wide snow water equivalent of 4.5 inches which is 30 percent of the seasonal (April 1) average and 35 percent of the May 1 average. Last year at this time the basin was holding .8 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan Region** was 80 percent of normal. Precipitation last month was about 20 percent of the monthly average. Seasonal precipitation at this time last year stood at 60 percent of normal. Seasonal precipitation on the **South Lahontan** was 85 percent of normal. Precipitation last month was less than 5 percent of the monthly average. Seasonal precipitation at this time last year stood at 30 percent of normal.

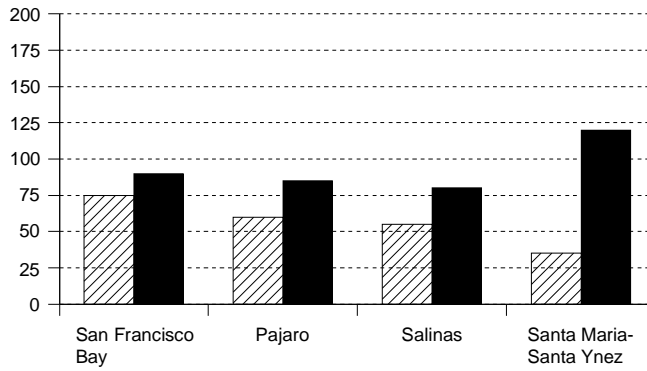
RESERVOIR STORAGE- First of the month storage in 5 **North Lahontan** reservoirs was 450 thousand acre-feet which is 75 percent of average. About 40 percent of available capacity was being used. Storage in these reservoirs at this time last year was 130 percent of average. Lake Tahoe was 2.1 feet above its natural rim on May 1. First of the month storage in 8 **South Lahontan** reservoirs was 238 thousand acre-feet which is 90 percent of average and about 60 percent of available capacity. Storage in these reservoirs at this time last year was 115 percent of average.

RUNOFF- Seasonal runoff of streams draining the **North Lahontan Region** totaled 231 thousand acre-feet which is 55 percent of average for this period. Last year, runoff for the same period was 70 percent of average. Seasonal runoff of the Owens River in the **South Lahontan** totaled 52 thousand acre-feet which is 70 percent of average for this period. Last year runoff for this same period was 95 percent of average.

SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

Precipitation

October 1 to date in % of Average

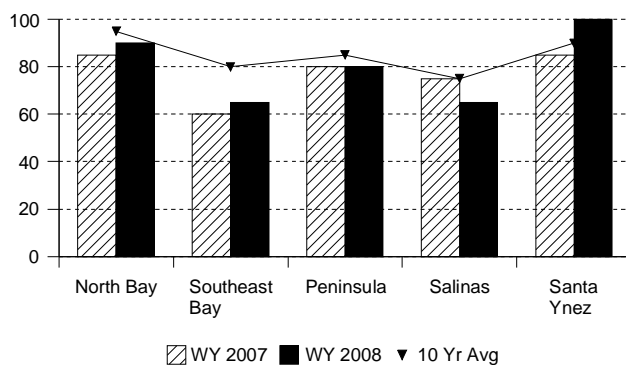


PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 90 percent of normal. Precipitation last month was about 10 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal.

Seasonal precipitation on the **Central Coast Region** was 95 percent of normal. Precipitation last month was about 15 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal.

Reservoir Storage

Contents of major reservoirs in % of capacity

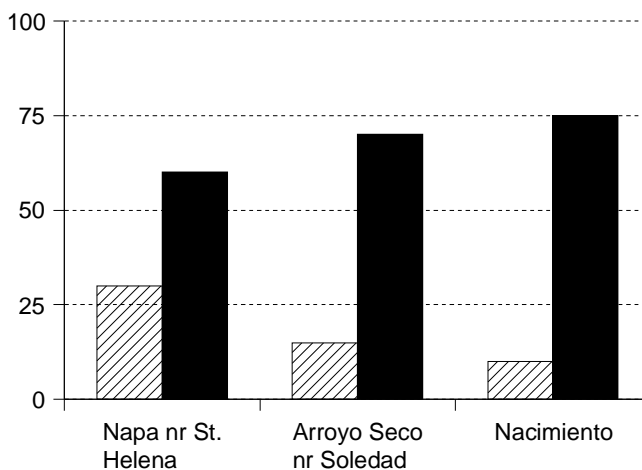


RESERVOIR STORAGE- First of the month storage in 14 **San Francisco Bay Region** reservoirs was 386 thousand acre-feet which is 95 percent of average. About 70 percent of available capacity was being used. Storage in these reservoirs at this time last year was 90 percent of average.

First of the month storage in 6 **Central Coast Region** reservoirs was 706 thousand acre-feet which is 100 percent of average and about 75 percent of available capacity. Storage in these reservoirs at this time last year was 105 percent of average.

Runoff

October 1 to date in % of average



RUNOFF- Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 45 thousand acre-feet which is 60 percent of average for this period. Last year, runoff for the same period was 30 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 232 thousand acre-feet which is 75 percent of average for this period. Last year runoff for this same period was 10 percent of average.

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION - October through April (seasonal) precipitation on the **South Coast Region** was 80 percent of normal. April precipitation was 5 percent of the monthly average. Seasonal precipitation at this time last year was 30 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** was 85 percent of normal. Precipitation during April was 0 percent of average. Seasonal precipitation at this time last year stood at 45 percent of average.

RESERVOIR STORAGE - May 1 storage in 29 major **South Coast Region** reservoirs was 1.5 million acre-feet or 95 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 85 percent of average.

On May 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 25.9 million acre-feet or about 64 percent of average. About 49 percent of available capacity was in use. Last year at this time, these reservoirs were storing 67 percent of average.

RUNOFF - Seasonal runoff from selected **South Coast Region** streams totaled 36 thousand acre-feet which is 75 percent of average. Seasonal runoff from these streams last year was 20 percent of average.

COLORADO RIVER

The April July inflow to Lake Powell is forecast to be 9.7 million acre-feet, which is 122 percent of average. The May 1 snowpack in the Colorado River basin above Lake Powell was 110 percent of average, highest in the San Juan at 115 percent and lowest in the Escalante at 55 percent.

STATE WATER PROJECT

On April 30, total storage in the major SWP reservoirs was about 3.14 MAF, compared with about 4.56 MAF at this time in 2007. End of month storage at Lake Oroville was about 1.71 MAF as compared to 3.08 MAF last year. The State's share of San Luis Reservoir storage was about 841 TAF, as compared to 878 TAF at this time last year. The combined storage in our southern reservoirs was about 594 TAF, compared with about 607 TAF at this time last year.

SWP water deliveries through April 2008 are estimated to be about 369 TAF, which is about 186 TAF less than the same period in 2007. This is a combination of project, transfer and exchange waters.

Due to the dry conditions in the Sacramento Valley in April, the Department's SWP allocation remained at 35% (about 1.46 MAF).

CENTRAL VALLEY PROJECT

As of May 1, 2008, total Northern CVP storage was 7.2 million acre-feet, which is a decrease of 2.1 million acre-feet compared to one year ago and is approximately 76% of normal for that date. The Bureau of Reclamation did not revise water year 2008 allocations for the CVP contractors. Based on a conservative water supply forecast prepared from information available April 1, 2008, and a forecasted water year inflow into Shasta Reservoir of 4.02 million acre-feet, CVP water supplies were: Agricultural contractors North of Delta 45% and South of Delta 45%; Urban contractors North of Delta 75% and South of Delta 75%; Sacramento River water rights and San Joaquin Exchange Contractors 100%; Wildlife Refuges 100%; Eastside Division contractors (Stanislaus River) projected to be 35,000 acre-feet; Friant Division contractors 100% of Class 1 and 5% for Class 2. Updated allocations may be announced in mid-May.

The forecast of CVP operations will be available on the Mid-Pacific Region's website at <http://www.usbr.gov/mp>.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	2007 1,000 AF	STORAGE AT END OF April 2008 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
<i>STATE WATER PROJECT</i>						
Lake Oroville	3,538	2,939	3,078	1,707	58%	48%
San Luis Reservoir (SWP)	1,062	979	878	841	86%	79%
Lake Del Valle	77	39	38	41	106%	53%
Lake Silverwood	73	69	73	72	104%	98%
Pyramid Lake	171	163	167	163	100%	95%
Castaic Lake	325	287	297	289	101%	89%
Perris Lake	132	118	71	71	60%	54%
<i>CENTRAL VALLEY PROJECT</i>						
Trinity Lake	2,448	2,049	2,066	1,670	81%	68%
Lake Shasta	4,552	3,974	3,901	2,954	74%	65%
Whiskeytown Lake	241	232	238	238	103%	99%
Folsom Lake	977	730	740	537	74%	55%
New Melones Reservoir	2,420	1,482	1,909	1,410	95%	58%
Millerton Lake	520	365	295	257	71%	50%
San Luis Reservoir (CVP)	971	882	688	623	71%	64%
<i>COLORADO RIVER PROJECT</i>						
Lake Mead	26,159	20,061	13,426	12,463	62%	48%
Lake Powell	24,322	18,335	11,784	11,195	61%	46%
Lake Mohave	1,810	1,671	1,742	1,650	99%	91%
Lake Havasu	619	587	571	566	96%	91%
<i>EAST BAY MUNICIPAL UTILITY DISTRICT</i>						
Pardee Res	198	182	183	174	96%	88%
Camanche Reservoir	417	266	289	200	75%	48%
East Bay (4 res.)	147	136	123	117	86%	80%
<i>CITY AND COUNTY OF SAN FRANCISCO</i>						
Hetch-Hetchy Reservoir	360	166	299	165	99%	46%
Cherry Lake	268	152	257	177	117%	66%
Lake Eleanor	26	15	22	26	173%	101%
South Bay/Peninsula (4 res.)	225	180	147	157	87%	70%
<i>CITY OF LOS ANGELES (D.W.P.)</i>						
Lake Crowley	183	125	148	133	106%	72%
Grant Lake	48	26	35	22	84%	45%
Other Aqueduct Storage (6 res.)	95	75	58	48	64%	50%

TELEMETERED SNOW WATER EQUIVALENTS

May 1, 2008

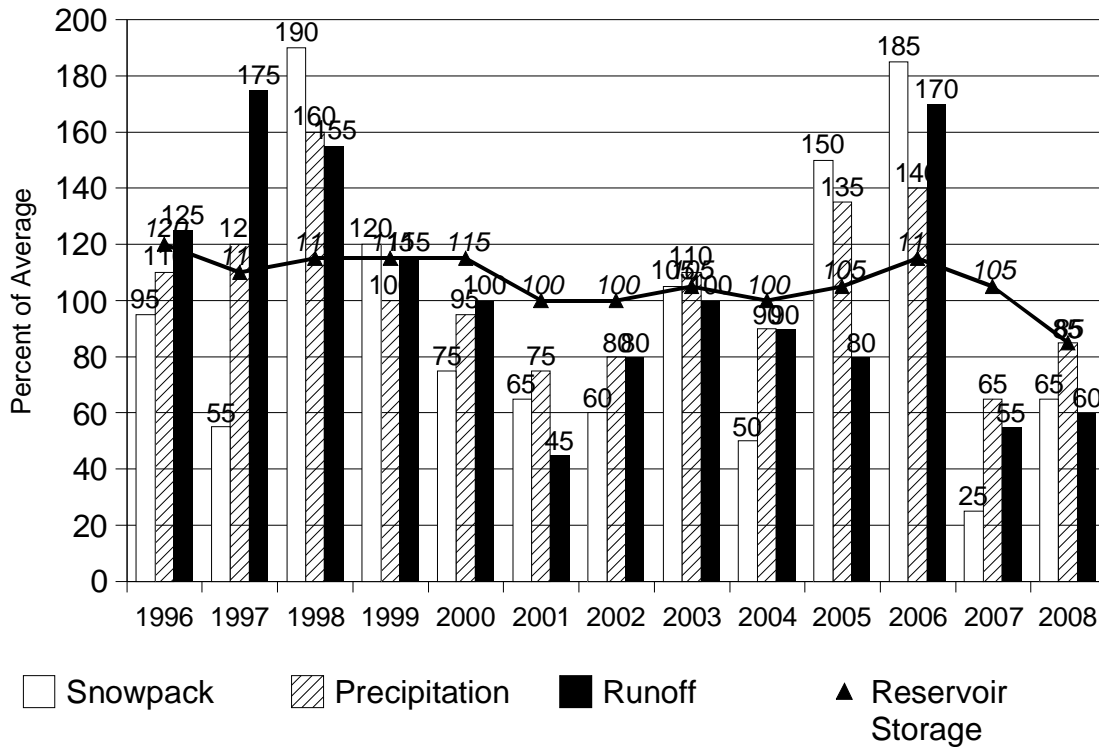
(AVERAGES BASED ON PERIOD RECORD)

		INCHES OF WATER EQUIVALENT				
BASIN NAME		APRIL 1	PERCENT	24 HRS	1 WEEK	
STATION NAME	ELEV	AVERAGE	May 1 OF AVERAGE	PREVIOUS	PREVIOUS	
TRINITY RIVER						
Peterson Flat	7150'	29.2	23.9	81.7	23.7	27.9
Red Rock Mountain	6700'	39.6	—	—	—	—
Bonanza King	6450'	40.5	42.2	104.3	42.7	45.0
Shimmy Lake	6400'	40.3	35.9	89.0	36.2	37.9
Middle Boulder 3	6200'	28.3	22.2	78.4	22.4	26.6
Highland Lakes	6030'	29.9	26.4	88.3	27.4	33.4
Scott Mountain	5900'	16.0	19.2	120.0	19.3	22.3
Mumbo Basin	5650'	22.4	—	—	—	—
Big Flat	5100'	15.8	20.2	128.2	20.2	23.2
Crowder Flat	5100'	—	0.0	—	0.0	0.0
SACRAMENTO RIVER						
Cedar Pass	7100'	18.1	13.7	75.7	13.6	16.3
Blacks Mountain	7050'	12.7	—	—	—	—
Sand Flat	6750'	42.4	18.3	43.2	18.3	20.9
Medicine Lake	6700'	32.6	17.0	52.3	16.8	19.6
Adin Mountain	6200'	13.6	1.7	12.5	1.8	5.8
Snow Mountain	5950'	27.0	24.7	91.6	25.2	28.4
Slate Creek	5700'	29.0	32.1	110.6	33.5	38.8
Stouts Meadow	5400'	36.0	—	—	—	—
FEATHER RIVER						
Lower Lassen Peak	8250'	—	85.1	—	85.7	85.3
Kettle Rock	7300'	25.5	11.1	43.7	11.7	15.6
Grizzly Ridge	6900'	29.7	9.8	33.1	10.7	15.2
Pilot Peak	6800'	52.6	13.9	26.5	14.7	21.4
Gold Lake	6750'	36.5	25.5	69.9	26.0	28.6
Humbug	6500'	28.0	23.6	84.4	24.0	28.1
Harkness Flat	6200'	28.5	9.1	31.8	9.2	13.6
Rattlesnake	6100'	14.0	0.6	4.3	1.2	6.6
Bucks Lake	5750'	44.7	43.6	97.4	44.5	48.6
Four Trees	5150'	20.0	6.0	29.8	8.2	14.8
EEL RIVER						
Noel Spring	5100'	—	0.0	—	0.0	1.4
YUBA & AMERICAN RIVERS						
Lake Lois	8600'	39.5	—	—	—	—
Schneiders	8750'	34.5	27.4	79.6	28.2	32.1
Carson Pass	8353'	—	18.2	—	17.0	20.4
Caples Lake	8000'	30.9	9.5	30.6	10.7	16.4
Alpha	7600'	35.9	15.0	41.7	15.4	20.6
Meadow Lake	7200'	55.5	29.9	53.9	29.7	34.9
Silver Lake	7100'	22.7	0.1	0.4	0.3	7.4
Central Sierra Snow Lab	6900'	33.6	11.3	33.6	12.1	18.4
Huysink	6600'	42.6	24.2	56.9	24.7	27.8
Van Vleck	6700'	35.9	17.2	48.0	17.6	23.9
Robinson Cow Camp	6480'	—	0.0	—	0.0	6.9
Robbs Saddle	5900'	21.4	7.8	36.7	8.4	14.6
Greek Store	5600'	21.0	—	—	—	—
Blue Canyon	5280'	9.0	0.7	7.6	1.1	9.7
Robbs Powerhouse	5150'	5.2	0.0	0.0	0.0	0.9
MOKELUMNE & STANISLAUS RIVERS						
Deadman Creek	9250'	37.2	27.9	75.1	27.8	31.2
Highland Meadow	8700'	47.9	19.1	39.8	19.3	22.7
Gianelli Meadow	8400'	55.5	27.0	48.7	27.6	31.2
Lower Relief Valley	8100'	41.2	23.2	56.2	23.7	27.9
Blue Lakes	8000'	33.1	22.7	68.6	22.5	25.3
Mud Lake	7900'	44.9	32.9	73.2	33.0	37.2
Stanislaus Meadow	7750'	47.5	25.0	52.6	25.1	29.5
Bloods Creek	7200'	35.5	13.2	37.1	13.9	19.5
Black Springs	6500'	32.0	19.2	60.1	19.7	23.2
TUOLUMNE & MERCED RIVERS						
Tioga Pass Entrance	9945'	—	—	—	—	—
Dana Meadows	9800'	27.7	25.3	91.3	25.3	25.3
Slide Canyon	9200'	41.1	28.9	70.4	29.7	32.6
Lake Tenaya	8150'	33.1	18.2	55.1	18.9	22.9
Tuolumne Meadows	8600'	22.6	0.9	4.2	2.0	6.0
Horse Meadow	8400'	48.6	38.1	78.3	38.0	43.1
Ostrander Lake	8200'	34.8	16.6	47.8	17.2	20.8
White Wolf	7900'	—	11.5	—	12.2	18.1
Paradise Meadow	7650'	41.3	21.6	52.4	22.5	27.2
Gin Flat	7050'	34.2	13.3	39.0	14.3	19.4
Lower Kibbie Ridge	6700'	27.4	4.7	17.1	5.7	12.5

SAN JOAQUIN RIVER						
Volcanic Knob	10050'	30.1	21.8	72.3	22.3	24.4
Agnew Pass	9450'	32.3	3.6	11.0	18.0	21.8
Kaiser Point	9200'	37.8	7.7	20.5	8.6	14.1
Green Mountain	7900'	30.8	5.5	18.0	6.6	13.9
Tamarack Summit	7550'	30.5	5.5	18.1	6.5	13.4
Chilkoot Meadow	7150'	38.0	23.2	60.9	23.9	29.4
Huntington Lake	7000'	20.1	5.0	25.1	5.8	11.4
Graveyard Meadow	6900'	18.8	2.4	12.8	3.5	9.6
Poison Ridge	6900'	28.9	5.2	17.9	6.1	14.6
KINGS RIVER						
Bishop Pass	11200'	34.0	20.2	59.4	20.3	20.4
Charlotte Lake	10400'	27.5	22.3	81.2	23.2	26.3
State Lakes	10300'	29.0	—	—	—	—
Mitchell Meadow	9900'	32.9	31.5	95.7	32.4	33.1
Blackcap Basin	10300'	34.3	27.4	80.0	27.8	30.1
Upper Burnt Corral	9700'	34.6	18.4	53.3	22.8	26.5
West Woodchuck Meadow	9100'	32.8	11.9	36.3	12.9	19.9
Big Meadows	7600'	25.9	10.2	39.3	11.1	18.6
KAWEAH & TULE RIVERS						
Farewell Gap	9500'	34.5	30.6	88.6	31.0	33.0
Quaking Aspen	7200'	21.0	0.4	1.8	0.8	5.3
Giant Forest	6650'	10.0	0.0	0.0	0.0	0.3
KERN RIVER						
Upper Tyndall Creek	11400'	27.7	16.5	59.6	17.0	20.5
Crabtree Meadow	10700'	19.8	7.3	36.9	7.8	11.5
Chagoopa Plateau	10300'	21.8	8.2	37.4	9.7	12.1
Pascoes	9150'	24.9	12.2	49.0	13.1	19.5
Tunnel Guard Station	8900'	15.6	0.0	0.0	0.0	0.0
Wet Meadows	8950'	30.3	—	—	—	—
Casa Vieja Meadows	8300'	20.9	5.3	25.4	6.2	12.0
Beach Meadows	7650'	11.0	0.0	0.0	0.0	0.0
SURPRISE VALLEY AREA						
Dismal Swamp	7050'	29.2	25.9	88.7	25.2	28.1
TRUCKEE RIVER						
Independence Lake	8450'	41.4	—	—	—	29.5
Big Meadows	8700'	25.7	9.0	35.0	8.9	15.2
Squaw Valley	8200'	46.5	26.2	56.3	26.2	31.7
Independence Camp	7000'	21.8	3.4	15.6	4.4	9.8
Independence Creek	6500'	12.7	0.0	0.0	0.0	4.9
Truckee 2	6400'	14.3	0.0	0.0	0.1	5.5
LAKE TAHOE BASIN						
Mount Rose Ski Area	8900'	38.5	24.2	62.9	24.3	27.4
Heavenly Valley	8800'	28.1	8.2	29.2	8.9	15.3
Hagans Meadow	8000'	16.5	0.0	0.0	0.0	0.5
Marlette Lake	8000'	21.1	9.8	46.4	9.9	16.1
Echo Peak 5	7800'	39.5	17.1	43.3	17.7	24.1
Rubicon Peak 2	7500'	29.1	19.6	67.4	19.6	22.6
Tahoe City Cross	6750'	16.0	0.0	0.0	0.0	0.0
Ward Creek 3	6750'	39.4	20.5	52.0	20.2	26.0
Fallen Leaf Lake	6250'	7.0	—	—	—	—
CARSON RIVER						
Ebbetts Pass	8700'	38.8	19.4	50.0	19.0	22.9
Horse Meadow	8557'	—	6.9	—	7.2	11.4
Forestdale Creek	8017'	—	21.4	—	21.7	23.4
Poison Flat	7900'	16.2	0.0	0.0	0.0	1.6
Monitor Pass	8350'	—	1.1	—	1.9	6.8
Spratt Creek	6150'	4.5	0.0	0.0	0.0	0.0
WALKER RIVER						
Leavitt Lake	9600'	—	44.8	—	45.0	48.1
Summit Meadow	9313'	—	18.0	—	18.1	22.5
Virginia Lakes	9300'	20.3	17.5	86.2	17.3	18.4
Lobdell Lake	9200'	17.3	9.4	54.3	9.6	15.5
Sonora Pass Bridge	8750'	26.0	19.4	74.6	19.5	24.5
Leavitt Meadows	7200'	8.0	0.0	0.0	0.0	0.0
OWENS RIVER/MONO LAKE						
Gem Pass	10750'	31.7	25.5	80.4	25.3	26.6
Sawmill	10200'	19.4	4.2	21.8	5.3	12.1
Cottonwood Lakes	10150'	11.6	0.0	0.0	0.0	0.0
Big Pine Creek	9800'	17.9	12.2	68.0	12.9	19.8
South Lake	9600'	16.0	5.5	34.5	6.1	10.7
Mammoth Pass	9300'	42.4	28.3	66.8	28.8	31.9
Rock Creek Lakes	10000'	14.0	0.0	0.0	0.0	3.5

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE						
AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY	
Central Valley North	45%	70%	90%	100%	75%	
Central Valley South	45%	65%	85%	100%	80%	
North Coast	40%	60%	85%	100%	80%	

May 1 Statewide Conditions



SNOWLINES

The 76th Western Snow Conference meeting in Hood River, OR was well attended with many interesting presentations. Start now on your plans to attend the 2009 meeting in Alberta, Canada. Bruce McGurk, from our own South Pacific region is the new general chair. As always further information is available at <http://www.westernsnowconference.org> or by contacting Frank Gehrke at 916-574-2635.

Depicted on this month's are Don Paulsen and John Rawles demonstrating how not to conduct a snow survey. This photograph was taken in 1957 in the Tuolumne River.

SNOWPACK-Snow data is a major index of spring and summer runoff from Sierra Nevada watersheds. April 1 data historically reflects the magnitude of the snowpack at or near the maximum seasonal accumulation. Averages are based on April 1 data for the period 1951-2000 (50 years, except for data sites established after 1951).

PRECIPITATION -Averages are usually based on data for the period 1951-2000 (50 years, except for data sites established after 1951).

RUNOFF AND FORECASTS -Runoff data and runoff forecasts are shown as unimpaired values. Unimpaired runoff represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Forecast of runoff assumes median conditions subsequent to the date of forecast.

Runoff probability ranges are statistically derived from historical data. The 80 percent probability range is comprised of the 90 percent exceedence level value and the 10 percent exceedence level value. This means that actual runoff should fall within the stated limits eight times out of ten.

Runoff averages for most streams are based on the period 1956-2005.

Reservoir storage averages are based on the period from 1956 (or beginning of operation) to 2005.

For more details contact California Cooperative Snow Surveys, P.O. Box 219000, Sacramento, CA 95821-9000, (916) 574-2635 or gridley@water.ca.gov.

INDICES OF WATER AVAILABILITY

The Sacramento River water year unimpaired runoff is the sum of: Sacramento River above Bend Bridge, Feather River Inflow to Lake Oroville, Yuba River near Smartville and American River Inflow to Folsom Lake.

The Sacramento Valley Water Year Hydrologic Classification (40-30-30 Index). The values 40-30-30 represent the percentage weight given to the three variables in the formula for the index. The first variable is the forecasted unimpaired runoff from April through July (40 percent). The second variable is the forecasted unimpaired runoff from October through March (30 Percent). The third variable is the previous year's index with a cap to account for required flood control releases during wet years. The basins used in this computation are those used in the Sacramento River water year unimpaired runoff.

The San Joaquin Valley Water Year Hydrologic Classification (60-20-20 Index). In a similar manner the values 60-20-20 represent the percentage weights on April through July runoff, October through March runoff and previous year's Index. The San Joaquin River unimpaired runoff is the sum of: Stanislaus River below Goodwin, Tuolumne River below La Grange, Merced River below Merced Falls and San Joaquin River Inflow to Millerton Lake.

Runoff of the eight major rivers of the Sacramento and San Joaquin Regions is the sum of the runoff in the eight major rivers used in the two above indices.

State of California – The Resources Agency
DEPARTMENT OF WATER RESOURCES
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First Class

